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Pirates of the 21st Century: The Threat and Promise of Digital Audio Technology on the Internet

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Pirates of the 21st Century: The Threat and Promise of Digital Audio Technology on the Internet

Rebecca J. Hill[†]

[A]s sure as you or I are sitting in this courtroom today, some bright young entrepreneur . . . is going to come up with a device to unjam the jam. And then we have a device to jam the unjamming of the jam and we all end up like jelly.¹

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The author and the Journal acknowledge that due to the transient nature of the Internet, certain web sites may no longer be active after this article is published. Hence, web site references are on file with the Santa Clara Computer and High Technology Journal.

1. PAUL GOLDSTEIN, COPYRIGHT'S HIGHWAY: THE LAW AND LORE OF COPYRIGHT FROM GUTENBERG TO THE CELESTIAL JUKEBOX 159 (1994) [hereinafter GOLDSTEIN] (citing JAMES LARDNER, FAST FORWARD, 119-20 (1987) (reporting on Judge Ferguson's observations during the Sony trial). When one of the plaintiffs in the Sony trial offered expert testimony that a "low cost jamming device" could make it impossible to "record a television program without the copyright owner's permission," it is reported that Judge Ferguson's reaction was pointed as to what would happen if he were to order Sony to put such a jamming device in its video recorders. See *id.*; see also Universal Studios, Inc. v. Sony Corp. of Am., 480 F. Supp. 429 (C.D. Cal. 1979).

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I. INTRODUCTION

The Internet is changing the way many organizations conduct business. The recording industry is one such example. Digital music technologies and the Internet now allow for the promotion, distribution, broadcast, and sale of music on-line every day.² A March 1999 Forrester study predicts that sales of downloadable music through the Internet will reach \$1.3 billion by 2003.³

One of the leading agents of this revolution is a popular digital audio compression technology called MP3.⁴ MP3 technology permits extremely high-quality audio to be "transferred, stored, and categorized on almost any computer."⁵ In the past three years, students at college campuses equipped with high-speed networks have been utilizing MP3 to "rip CD tracks and trade them" on the Internet.⁶

2. See Jeffrey D. Neuburger & Susan Israel, *Music Industry Acts in Concert on Sound Samples: Harmonious Compromise Could Resolve Licensing Issues Arising From the Downloading of Music*, NAT'L L.J., Jan. 26, 1998, at C17.

3. See James Ledbetter, *The Size Problem*, THE INDUS. STANDARD, Feb. 7, 2000, at 61 (stating that the \$1.3 billion figure "overlooks the paradox intrinsic to the idea of major labels running the digital download business: if they start charging, they will remove a major part of its appeal; if they keep it free, they cannibalize their own sales."); see also Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc., 180 F.3d 1072, 1074 (9th Cir. 1999) (citing Jupiter Communications, *Jupiter Projects Meager \$30m in Digital Distribution Revenue*, July 15, 1998 (press release), available in 1998 WL 14096262 (that on-line sales in pre-recorded music will exceed \$1.4 billion by 2002 in the United States)).

4. MP3, which stands for "Motion Picture Experts Group-1 audio layer three," is the most popular form of digital audio compression available on the Internet. For more information about MP3 audio compression, see KIERSTEN CONNER-SAX & ED KROL, *THE WHOLE INTERNET: THE NEXT GENERATION* 360 (1999).

5. CONNER-SAX & KROL, *supra* note 4, at 360.

6. Randall Rothenberg, *Rob Glaser, Moving Target: The Man Behind the RealPlayer Races Ahead with RealJukeBox, His Aggressive Scheme to Dominate the Downloadable Universe*, WIRED, Aug. 1993, at 126, 132. "Ripping" is the term used to describe the process of taking music from a CD and converting it to MP3 format. See CONNER-SAX & KROL, *supra*

Similarly, MP3's popularity has invigorated numerous entrepreneurs, music fans, and musicians to design innovative MP3 peripherals.⁷ Several factors contribute to MP3's impact, most notably: (1) the affordability of computers, most equipped with CD-ROM and sound output; (2) the growth of the Internet and its host of decentralized e-commerce possibilities; and (3) the promise of broadband, high-speed Internet access to consumers.⁸

The excitement about the Internet and digital audio technology has been accompanied by trepidation from the established recording industry. More specifically, the recording industry, "accustomed to having solid control over product distribution," is especially concerned by the way the Internet is changing traditional models of music distribution and transmission.⁹ Since 1994, The Recording Industry Association of America (RIAA),¹⁰ a lobbying group representing record companies, has been very concerned about its ability to enforce its copyrights in light of the ease in which "sound recordings and other information" may be uploaded and distributed.¹¹

note 4, at 363 ("Programs called CD 'rippers' take tracks played by your computer's CD-ROM drive and store them in electronic form on your hard drive. The resulting files can be encoded as MP3.").

7. For example, several MP3 players are in development, including portables, home stereo components, and car stereos. See Jesse Freund, *The MP3 Players*, WIRED, Aug. 1999, at 136-137.

8. CONNER-SAX & KROL, *supra* note 4, at 361; see also Christopher Jones, *Digital Music at the Crossroads* (Apr. 19, 1999) <<http://www.wired.com/news/culture/0,1284,19171,00.html>> (quoting Marc Geiger, CEO of Internet music company "Artist Direct": "In the next five years, you'll start to see higher-bandwidth connections, and as that happens, you'll see a shift in the economy of the music business. . . . We'll need to figure out other revenue streams to make up for this loss of value. In the short term, it's going to be a nightmare.").

9. See Beth Lipton Krigel, *Music Firms Mull Net Copyright Claim* (June 15, 1998) <<http://www.news.com/News/Item/0,4,23170,00.html>> (reporting on the dilemma facing the recording industry: "On one hand, [the industry] wants to be active on the Net, where analysts say billions of dollars will change hands for music in the next five years. At the same time, however, the industry is fighting for control of a global medium"); see also Alan Saracevic, *A Wrench in the Music Machine On-line Migration is Changing the Face of the Recording Industry*, S.F. EXAMINER, Dec. 20, 1998, at B1 (stating that the music industry is "fearing the Internet's potential for piracy").

10. The RIAA represents nearly all of the record companies in the United States. See generally *About Us: Frequently Asked Questions about the RIAA* (visited Mar. 10, 2000) <http://www.riaa.com/about/ab_faq.htm>; see also *About Us* (visited Mar. 10, 2000) <<http://www.riaa.com/about/aboutus.htm>> ("Our mission is to foster a business and legal climate that supports and promotes our members' creative and financial vitality around the world. In support of our mission, we work to protect intellectual property rights worldwide and the First Amendment rights of artists; conduct consumer, industry and technical research; and monitor, review and influence state federal laws, regulations and policies.").

11. See Russell Shaw, *CES - Recording Industry Exec Calls Internet "Threat,"*

As a result of these concerns, the RIAA and individual record companies have been aggressive about enforcing their intellectual property rights on-line.¹² The resulting controversy surrounding MP3 and new MP3-based services and technologies has generated tremendous discussions regarding intellectual property, the Internet, and the music industry.¹³

This comment will address some of the issues raised by MP3-related litigation and examine the difficulties in balancing the interests mentioned above.¹⁴ To this end, Part II will provide some background information about the Internet and privacy concerns raised by digital audio technology. Part II will also include an introduction to provisions in U.S. copyright law that govern musical works and discuss the scope and limitations of a copyright owner's exclusive rights to reproduce and distribute his or her works in conjunction with both the Internet and digital audio technologies.

Following this discussion, Part III will then explore the impact that MP3 technology and digital music on the Internet may have on the recording industry and will provide some background information on recent cases that expose the complex web of interests including copyright law, digital audio technology, and the Internet. Next, Part

NEWSBYTES NEWS NETWORK, June 23, 1994, available in 1994 WL 2416354 (quoting RIAA's David Leibowitz saying the RIAA "says it is concerned about the specter of bulletin board system (BBS) owners digitizing a CD, capturing it in computer memory, and then sending it out over the BBS to anyone with Internet access who chooses to receive the material."); see also Laurent Belsie, *Who Pays for What on Tomorrow's Internet?*, CHRISTIAN SCI. MONITOR, Oct. 25, 1995, at 1, available in 1995 WL 6397558 (stating that "many Internet experts argue that this technology soon will overwhelm the copyright laws.").

12. See Andrew Leonard, *Mutiny on the Net* (visited Mar. 5, 2000) <http://www.salon.com/21st/feature/1998/03/cov_20feature.html>.

13. MP3 and copyright law on the Internet underscore "a number of issues regarding copyright and intellectual property law that have pitted record industry stalwarts against underground music distributors." Jim Hu, *Music Group Sues Over MP3 Device* (Oct. 9, 1998) <<http://www.news.com/News/Item/0,4,27376,00.html>>. Problems and opportunities associated with digital musical distribution are illustrative of many of the issues intellectual property rights owners will face as the Internet matures. See Ross J. Charap & Jessica L. Rothstein, *O'er the Ramparts We Watched: The Struggle to Control the Distribution of Music on the Internet*, INTELL. PROP. TODAY, Sept. 1999, at 18, available in LEXIS, Legal Publications Group File ("[T]he Internet has been called 'the world's largest copying machine.' Nowhere are these problems more evident than in the recording industry where music's digital tribulations illustrate many of the issues intellectual property owners face as the Internet matures."). See also *Electronic Frontier Foundation Digital Audio and Free Expression Policy Statement* (May 1999) <http://www.eff.org/cafe/eff_audio_statement.html> (stating it is not just about music: "All kinds of information flows in digital audio forms, including talk radio, political speeches, commercial speech . . . public meetings and speeches . . . and spoken books.").

14. These interests are representative of the public and private interests inherent in United States copyright law. See discussion *infra* Part II.C.

IV will present critical observations regarding some of the proposals that have been offered by the recording industry and other interested parties for “securing” copyrighted audio content.

Ultimately, in Part V, this comment concludes that just as targeting the “players” for contributory copyright infringement has failed in the past,¹⁵ the RIAA and other copyright owners will probably not significantly deter business and consumer interest in digital audio technology by advocating radical changes in copyright law. Although the Internet presents new complexities, it does not change the nature and underlying purpose of copyright law. While unauthorized reproduction of copyrighted works is a valid concern for the recording industry, any measures to curb piracy must also consider the public interest in addition to the limitations on the copyright monopoly—legitimate non-infringing uses of digital audio technologies, like MP3. The Internet is providing new ways for many businesses to provide services and generate income. The recording industry must not force changes in the law that stifle this growth, but instead should adjust its own business practices to conform in a lawful manner.

II. BACKGROUND

A. *The Internet and Digital Audio Technology*

The Internet is a two-decade old global network of interconnected computers proven to have a substantial impact on everyday life.¹⁶ Many different programs use the Internet, perhaps most notably electronic mail, newsgroups, and the World Wide Web

15. See *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 429 (1984).

16. See *Reno v. ACLU*, 521 U.S. 844, 849 (1997); see also Barry M. Leiner et al., *A Brief History of the Internet* (visited Mar. 5, 2000) <<http://www.isoc.org/internet/history/brief.html>> [hereinafter *ISOC*]. The Federal Networking Council (FNC) passed a resolution defining the term ‘Internet’ in October of 1995. Developed “in consultation with the leadership of the Internet and Intellectual Property Rights (IPR) Communities,” the resolution defines “Internet” as

the global information system that—(i) is logically linked together by a globally unique address space based on the Internet Protocol (IP) or its subsequent extensions/follow-ons; (ii) is able to support communications using the Transmission Control Protocol/Internet Protocol (TCP/IP) suite or its subsequent extensions/follow-ons, and/or other IP-compatible protocols; and (iii) provides, uses or makes accessible, either publicly or privately, high level services layered on the communications and related infrastructure described herein.

Federal Networking Council, *FNC Resolution: Definition of “Internet”* (Oct. 24, 1995) <http://www.fnc.gov/Internet_res.html>.

(the "Web").¹⁷ Such programs can be used to transmit and receive audio and video content over the Internet.¹⁸ According to one of the inventors of the Web, "[t]he Web made the Net useful because people are really interested in information (not to mention knowledge and wisdom!) and don't really want to have to know about computers and cables."¹⁹ In short, the Internet has developed into more than just a collection of technologies, it is a collection of communities.²⁰

An enthusiastic community has grown around MP3 since 56K modems and 300+ MHZ Pentium processors became standard on PCs.²¹ Compressing audio files to about one tenth of their original size, MP3 technology allows digital audio files to be transferred "more quickly and stored more efficiently . . . without significantly reducing sound quality."²² Coupled with the rise of broadband Internet access—such as cable modems and DSL—MP3 provides an individual the ability to download an hour of music to a personal computer in a fraction of that time.²³ The popularity of MP3 is fueled by the format's freely available, non-proprietary compression technology, and the array of peripherals that incorporate MP3 technology.²⁴ By adopting the MP3 standard, a number of technologies and services have emerged that allow consumers, hardware manufacturers, retailers, artists, and record companies to

17. These three programs were discussed in *Reno v. ACLU*, 521 U.S. 844 (1997).

18. *See id.* at 851.

19. Tim Berners-Lee, *Frequently Asked Questions by the Press* (visited Mar. 10, 2000) <<http://www.w3.org/People/Berners-Lee/FAQ.html>>. Tim Berners-Lee conceived of the Web in 1989 and leads the World Wide Web Consortium (W3C), an organization responsible for coordinating the evolving standards associated with the Web.

20. *See ISOC*, *supra* note 16.

21. *See* Michael Behar, *It's Playback Time! And MP3 Is Only the Beginning*, *WIRED*, Aug. 1999, at 122.

22. *Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc.*, 180 F.3d 1072, 1074 (9th Cir. 1999); *see also* *CONNER-SAX & KROL*, *supra* note 4, at 360-61 (explaining that MP3s "[turn] raw sound data . . . into compressed representation via a set of complex mathematical transformations . . ." and providing the following example: "A five minute song at standard CD quality expressed as raw data is: 44,100 (sampling rate)*2 (bytes per sample)*2 (channels)*60*5=52,920,000 bytes, while a five-minute song compressed with MP3 with the usual encoding options is only: 128,000 (Kbps encoding rate, 2 channel)/8 bits per byte*60*5=4,800,000 bytes.".) *Id.*

23. *See* Vincent J. Roccia, Comment, *What's Fair is (Not Always) Fair on the Internet*, 29 *RUTGERS L.J.* 155, 161-62 (1997) (noting that compression facilitates the reproduction of large quantities of copyrighted material that can be disseminated through the global computer network in a matter of seconds).

24. *See* *Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc.*, 180 F.3d at 1074 (suggesting that the "freeness" of MP3 makes it preferable to other proprietary technologies); *see also* *Freund*, *supra* note 7.

utilize advanced digital audio features.²⁵

B. The Players

Whether downloaded from the Internet or “ripped” from a consumer’s compact disc (“CD”) collection, acquiring and listening to MP3 files is easy. Thousands of songs in the MP3 format—some authorized by performers, others not—may be downloaded from the Web at the click of a button.²⁶ In fact, “MP3” is one of the most frequently searched terms,²⁷ and many search engines have a feature allowing MP3-specific searches.²⁸ To help artists and record companies promote their products, and to assist music fans in sorting through the multitudes of MP3s, several MP3-specific “portals” have opened on the Web.²⁹ After locating a desired song, the MP3 version of the song can be downloaded onto a computer. Consequently, a user can then use a “decoder” program to play the file through their computer’s soundcard or upload it to a portable MP3 player.³⁰

25. See Ted Greenwald & Michael Behar, *Follow the Music: The Etune is Going Places*, WIRED, Aug. 1999, at 124-25.

26. Of those authorized, some are free. However, other artists require a fee for downloading their works. See *Rykodisc Endorses MP3* (Feb. 4, 1999) <<http://www.wired.com/news/news/technology/story/17727.html>> (reporting that Rykodisc is the largest music label to endorse MP3 digital audio format and conveying that Rykodisc’s decision to sell in that format was a “simple recognition of reality: MP3 is here, it’s being used, and to ignore it would only lead to more music pirating.”). The music industry also recognizes the potential for revenue from using the Internet to deliver music. See *Testimony Before the House Commerce Comm., Subcomm. on Telecommunications, Trade and Consumer Protection* (Oct. 28, 1999) (statement of Hilary Rosen, President & CEO, Recording Industry Association of America) <<http://www.riaa.com/musicleg/press/102899.htm>> [hereinafter *Testimony of Hilary Rosen*].

27. Internet search engines www.Searchterms.com and [Lycos.com](http://www.Lycos.com) both claim the term “MP3” is the second most frequently searched term, after “sex.” See Ronald Warren Deutsch, *Lycos Gets Fast with MP3* (Feb. 1, 1999) <<http://www.wired.com/news/news/culture/story/17651.html>>.

28. For example, the search engine [Altavista.com](http://www.Altavista.com) offers MP3-specific searches. While such search capabilities can be helpful, frustration often ensues because many links lead to discontinued pirate music sites which have been shut down by the RIAA. See generally Georgie Raik-Allen, *Players Line Up For Battle Over Online Music Industry* (Feb. 2, 1999) <<http://www.redherring.com/insider/1999/0202/news-music.html>>; see also Michael Robertson, *Shutting Down Pirates in 4 Easy Steps* (Nov. 30, 1998) <<http://www.mp3.com/news/119.html>> (noting “[a]s easy as it is for the pirate to find songs, it’s equally easy to find for policing purposes. The quickest way is to use one of the many search engines which have the ability to locate MP3 files specifically.”).

29. See, e.g., *About MP3.com* (visited Feb. 6, 2000) <<http://www.mp3.com/aboutus.html>> (“MP3.com is the premier Music Service Provider (MSP) allowing consumers to instantly discover, purchase, listen to, store and organize their music collection from anywhere, at any time, using any Internet device.”).

30. CONNER-SAX & KROL, *supra* note 4, at 362-63.

Alternately, using a computer equipped with a CD-ROM, an MP3 encoder,³¹ and a CD collection, a user can store his or her favorite songs on a computer hard drive. Once the music from the CD is converted into the MP3 format, it can easily be distributed among users in the same way as any other computer file—via a web page, an FTP site, on a disk, as an e-mail attachment, etc.³²

Numerous new products have been introduced that offer music fans a range of extended services that take advantage of MP3's compressed, digital format. Three specific technologies and services (and the controversy surrounding them), will be discussed in this comment: (1) The Rio portable MP3 player; (2) Napster; and (3) My.MP3.com.³³

The first product, the *Rio* PMP300 (the "Rio") portable music player is the most established technology that supports the popular MP3 format.³⁴ Introduced in November 1998, by Diamond Multimedia Systems, Inc., the Rio is a computer peripheral designed specifically for digital audio in the MP3 format. MP3 files stored on a computer hard drive are uploaded to the Rio. The Rio, having no moving parts, is capable of playing back MP3 files without any of the skipping traditionally present in portable CD players.³⁵ After overcoming legal barriers,³⁶ the Rio has garnered favorable consumer reviews, and other companies are developing similar and competing

31. An MP3 encoder is a software program that converts the digital embodiment of the music from the CD using MP3 compression. Many programs are available as freeware or shareware on the Internet. *See id.* at 363.

32. *See id.* at 361.

33. For a discussion of the legal issues, see discussion *infra* Part III.A.

34. *See Diamond Multimedia Ships Industry's First Widely Available Portable Internet Music Player, The Rio PMP300* (Nov. 23, 1998) <http://www.diamondmm.com/companypress_centerpress_releases.asp?ID=232> (press release) [hereinafter *Diamond Press Release*].

35. *See id.*

The *Rio* PMP300 is smaller than an audio cassette and has no moving parts so it won't skip, even during extreme movement. It is powered by a single AA alkaline battery for up to 12 hours of continuous playback. 32 MB of onboard flash memory provides up to 60 minutes of continuous digital quality playback and up to eight hours of voice quality audio. An add-on flash memory upgrade card is also available in a half-hour (16MB) configuration for \$49.95 (ERP) and a one-hour configuration (32MB) will be available in February for an ERP of \$99.95.

Id. *See also Rio PMP 300 Key Features* (visited Mar. 10, 2000) <http://209.10.46.178/default.asp?menu=RIO_300&sub_menu=>>.

36. See discussion *infra* Part III.A.1. for a description of the legal activities surrounding the *Rio* player.

players, including an MP3 player for use in automobiles.³⁷ The playback possibilities, including emergence of CD players that can simultaneously decode and play MP3 files have helped establish MP3 as the de facto standard in audio compression.³⁸

Second, a downloadable software program called Napster allows users to swap MP3 audio files directly from their computers.³⁹ Although still in its "beta" release, the Napster program has spread quickly, prompting some to describe its user base as "the fastest growing community in the history of the Net. . ."⁴⁰ Napster users store MP3 files on their hard drives and the Napster program sends a list of the songs on a user's hard drive to its central servers, thereby creating a giant searchable MP3 database.⁴¹ With Napster, users can locate and download their favorite music (in the MP3 format) with a "convenient, easy-to-use interface."⁴² The future of Napster is uncertain. In December 1999, the RIAA filed a federal lawsuit against

37. See Theta Pavis, *Taking MP3 to the Streets* (Feb. 4, 1999) <<http://wired.com/news/news/culture/story/17720.html>> (reporting that the surge in popularity of the MP3 format has driven "an informal network of people" to develop MP3 car-players). See also CONNER-SAX & KROL, *supra* note 4, at 364; See Freund, *supra* note 7, at 136.

38. See generally Charap & Rothstein, *supra* note 13; see also Pavis, *supra* note 37 (reporting the announcement that Internet music label GoodNoise and computer peripheral designer Adaptec have teamed up to develop software that will let CD players and car stereos read MP3 files recorded on CDs).

39. Courtney Macavinta, *Schools Crack Down on Net Music Software Napster* (Jan. 20, 2000) <<http://news.cnet.com/category/0-1005-200-1527930.html>>; see also Janelle Brown, *MP3 Free-For-All* (Feb. 3, 2000) <<http://www.salon.com/tech/feature/2000/02/03/napster/index.html>> (stating that Napster lets music fans "turn their computers into servers for the purpose of swapping MP3 files.").

40. Brown, *supra* note 39.

41. Unlike My.MP3.com, Napster does not store music on its own central servers; Napster merely facilitates the union of "downloader and downloadee." *Id.*

42. So, *What the Heck is Napster?* (visited Mar. 5, 2000) <<http://www.napster.com/whatisnapster.html>>. This web site includes the following description:

Napster is a completely new way of thinking about music online. Imagine. . . an application that takes the hassle out of searching for MP3s. No more broken links, no more slow downloads, and no more busy, disorganized FTP sites. With Napster, you can locate and download your favorite music in MP3 format from one convenient, easy-to-use interface.

What else does it do? Quite a bit, actually. Some highlights include:

PRIVATE CHAT – Allows Users to chat with each other in forums based on music genre.

AUDIO PLAYER – Plays MP3 files from right inside Napster, in case your don't have an external player or would prefer not to use one.

HOTLIST – Lets your keep track of your favorite MP3 libraries for later browsing.

Napster in California alleging contributory and vicarious copyright infringement.⁴³

Finally, "My.MP3.com," a "virtual CD player" service recently introduced by MP3.com, allows consumers to access the music they own on CD from any computer connected to the Internet.⁴⁴ MP3.com boasts an advanced set of security features—ownership is verified either through a digital receipt provided when a CD is purchased through a MP3.com retail partner, or through MP3.com's "Beam-it" software program—and claims that the only way to "get music into a My.MP3.com account is to own a physical CD."⁴⁵ To understand this service better, consider the following example. After placing a CD in a CD-ROM drive, Beam-it loads the music into an My.MP3.com account in a matter of seconds and verifies ownership by locating and uploading a code embedded from the CD to MP3.com. Subsequently, a user can then log onto their password-protected account and hear any song from their CD collection from any place with an Internet connection.⁴⁶ Like Napster, My.MP3.com has been met with some resistance. In January 2000, the RIAA filed a federal copyright suit in New York against MP3.com alleging that its My.MP3.com service violates the exclusive rights to reproduce copyrighted sound recordings.⁴⁷

The fidelity, compressibility, and transferability of the digital form make it all but "irresistible" when compared to the alternatives of analog recordings.⁴⁸ The digital format and its provision of "accessibility to the power of the modern digital computer," is

43. See *Ground Zero: The Future of Digital Music* (visited Mar. 5, 2000) <<http://www.napster.com/groundzero>>; see also *Recording Industry Sues Napster for Copyright Infringement* (Dec. 12, 1999) <http://www.riaa.com/piracy/pir_pr.htm>.

44. See *My.MP3.com Questions & Answers* (Jan. 20, 2000) <<http://bboard.mp3.com/mp3/ubb/Forum8/HTML/000050.html>>. This web site exists to help explain the "new and improved My.MP3.com" and to answer some common questions about the program. At one point, it is explained that "because the music is stored on the Net, a music fan can listen to their music library from work, home or any location which has a computer with Net access. Since more and more places are getting computers (e.g. some health clubs now have Net-enabled computers), this allows you to take your music with you." *Id.*

45. *Id.*

46. See Eliot Van Buskirk, *Music Distribution Evolves Another Step* (visited Mar. 14, 2000) <<http://www.cnet.com/consumerelectronics/0-3622-7-1542301.html?st.ce.3622-7-1542300.txt.3622-7-1542300>>.

47. See *Compl. for Copyright Infringement*, UMG Recordings, Inc., et al. v. MP3.com, Inc. (S.D.N.Y. 2000) (No. 00 Civ. 0472), available at (visited Mar. 16, 2000) <<http://www.mp3.com/news/533.html>>.

48. See GOLDSTEIN, *supra* note 1, at 197-99. In addition, the "clarity and durability" of the digital form "far exceeds" analog alternatives. *Id.*

integral to the thriving digital environment, the “new communications infrastructure.”⁴⁹ The recording industry and some copyright owners fear that consumers will stop purchasing pre-recorded music (records, tapes, and CDs), if consumers can easily download music from the Internet. This fear includes not only the loss of revenue attributable to pirated music, but perhaps more significantly, the loss of a familiar way of doing business.⁵⁰ Thus, the MP3 format has the music industry wondering what copyright law can do to protect its valued intellectual property.⁵¹

C. United States Copyright Law

Copyright is generally regarded as intellectual property.⁵² The intellectual component of copyright is the “products of the human mind,”⁵³ which is “incapable of possession except as it is embodied in a tangible article,”⁵⁴ such as a song recorded on a CD or lyrics in print. Copyright, like other forms of property is vulnerable to theft. Copyright owners rely upon copyright laws and lawyers to defend their musical works against piracy.⁵⁵

Copyright law originates from Article I, Section 8, Clause 8 of the United States Constitution.⁵⁶ The Constitution grants Congress the power to confer limited exclusive rights upon authors and inventors “to promote the Progress of Science and the useful Arts.”⁵⁷ At the “heart” of copyright law is a delicate balance between public and private interests; however, it is not always easy to determine which is which.⁵⁸ The theory is that copyright protection benefits

49. *Id.* at 198.

50. See CONNER-SAX & KROL, *supra* note 4, at 362; see also Vito Peraino, *The Law of Increasing Returns, Memo to the Music Industry: It's time to listen to the sound of the future*, WIRED, Aug. 1999, at 144.

51. See Daniel W. McDonald et al., *Intellectual Property and the Internet*, THE COMPUTER LAW., Dec. 1996, at 8 (emphasizing the host of legal issues, including copyright infringement, arising due to the ease of “accessing, reproducing, and transmitting digitized information”).

52. See ROBERT A. GORMAN & JANE C. GINSBURG, COPYRIGHT CASES AND MATERIALS 12 (5th ed. 1999).

53. GOLDSTEIN, *supra* note 1, at 9.

54. GORMAN & GINSBURG, *supra* note 52, at 12.

55. See GOLDSTEIN, *supra* note 1, at 8-9; see also, BLACK'S LAW DICTIONARY 1148 (6th ed. 1990) (“Piracy. Those acts of robbery and depredation upon the high seas which, if committed on land, would have amounted to a felony The term also applied to the illegal . . . reproduction of copyrighted matter . . .”).

56. U.S. CONST. art. 1, § 8, cl. 8.

57. *Id.*

58. See GOLDSTEIN, *supra* note 1, at 12-14.

society when the system of exclusive rights stimulates the dissemination of creative works.⁵⁹ The public receives the benefits of a wide range of creative expression while financial and social rewards encourage continued ingenuity and productivity.⁶⁰ However, this is a fragile balance. Congress has been granted the task of

defining the scope of the limited monopoly that should be granted to [creators] in order to give the public appropriate access to their work product. Because this task involves a difficult balance between the interest of authors and inventors in the control and exploitation of the writings and discoveries on the one hand, and society's competing interest in the free flow of ideas, information, and commerce on the other hand, our patent and copyright statutes have been amended repeatedly . . .⁶¹

Congress codified this attempt to balance promoting creative expression with society's interest in access to the products of that expression in the Copyright Act of 1976.⁶² The Copyright Act grants to authors of "original works of authorship" certain exclusive rights, including the right to: reproduce such works; to prepare derivative works; to distribute copies or phonorecords; to perform or display the works publicly; and to perform sound recordings publicly by means of a digital audio transmission.⁶³ The Act describes the duration, subject matter, scope, causes of action, and limitations to those exclusive rights.⁶⁴

1. Copyright And Musical Works

Most musical works involve two distinct copyrighted works: (1) the underlying musical composition (*e.g.* musical notation and lyrics); and (2) a physical embodiment of a particular performance of that musical composition, usually in the form of and referred to as a "sound recording."⁶⁵ While musical works on the Internet often

59. See GORMAN & GINSBURG, *supra* note 52, at 14 (noting that "the interest of authors must yield to the public welfare where they conflict . . .").

60. *Id.* at 14.

61. Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 429 (1984).

62. Copyright Act of 1976, Pub. L. No. 94-553, 90 Stat. 2541 (codified as amended at 17 U.S.C. §§ 101-1332 (1994)).

63. 17 U.S.C. § 106 (1994). Although these rights are often intertwined, this comment focuses primarily on the reproduction rights—the right to make copies.

64. *Id.* §§ 101-121.

65. 1 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT §§ 2.05[B], 2.10 (1999) [hereinafter NIMMER]. Until 1972, no federal copyright protection was available for sound recordings. Lewis Kurlantzick & Jacqueline E. Pennino, *The Audio Home Recording Act of 1992 and the Formation of Copyright Policy*, 45 J. COPYRIGHT SOC'Y U.S.A. 497, 499

implicate copyright claims in both the musical composition and the sound recording, this comment will focus on the sound recording, rather than the composition.⁶⁶ Generally, each of the copyrighted works has a different owner. For example, the composer of a work, or the composer's publisher, usually owns the copyright in the composition, while a record company typically owns the copyright in the sound recording.⁶⁷ The sound recording is usually the subject of an overall contractual relationship between the performer and his or her record company.⁶⁸ Most business relating to musical works concerns itself with the production, sale, and distribution of recorded music.⁶⁹ The recorded embodiment and the exclusive rights of reproduction and distribution of a musical work are more directly implicated in the controversy surrounding MP3.

2. Limits to the Exclusive Right to Reproduce—Fair Use Doctrine, *Sony*, and the AHRA

Attempts to address music piracy and the rights of consumers regarding digital music on the Internet are evident in existing limitations embodied in the Copyright Act and the history of copyright law and new media. The fair use doctrine, codified in § 107 of the Copyright Act, is one example of how Congress has addressed the tension between the public and copyright owners, by limiting the exclusive rights of the latter.⁷⁰ The doctrine was originally created by the courts and allows a third party to "use the copyrighted material in a reasonable manner without consent, notwithstanding the monopoly granted to the [copyright] owner."⁷¹ The doctrine also provides an affirmative defense to copyright infringement and requires courts to avoid the rigid application of the copyright statute when it would stifle the very creativity that the law

(1998).

66. Note, however, that the two components often travel together. See GORMAN & GINSBURG, *supra* note 52, at 514.

67. See NIMMER, *supra* note 65, § 8.19[A]. Licensing to cover performance rights—the contributions by the composers and publishers for the underlying composition—are generally handled by performance rights societies, BMI or ASCAP, while the mechanical reproduction of the composition is generally handled by the Harry Fox Agency. See *id.*

68. *Id.* § 24.01.

69. See *id.*

70. 17 U.S.C. § 107 (1994).

71. *Rosemont Enters., Inc. v. Random House, Inc.*, 366 F.2d 303, 306 (2d Cir. 1966), *cert. denied*, 385 U.S. 1009 (1967) (citing H. BALL, COPYRIGHT AND LITERARY PROPERTY 260 (1944)).

is designed to foster.⁷²

Courts have recognized that the fair use doctrine strikes a balance between the dual risks created by the copyright system; namely, that although depriving authors of their monopoly may reduce their incentive to create, granting authors a complete monopoly could reduce the creative ability of others. Because the fair use doctrine gives courts some flexibility in applying copyright law, the fair use doctrine will probably play a pivotal role in the development of copyright law on the Internet.

One of the foremost cases dealing with fair use is *Sony Corp. of America v. Universal City Studios*.⁷³ In *Sony*, plaintiffs Universal City Studios and Walt Disney Co. alleged that defendant Sony Corporation, the manufacturer of the Betamax videocassette recorder, was liable for contributory copyright infringement and that the home taping of copyrighted television programs for later viewing (a practice the court dubbed "time-shifting") violated Universal and Disney's copyright in those programs.⁷⁴ Defendant Sony asserted the fair use doctrine as an affirmative defense. Ultimately, the Supreme Court held that the act of home video taping for private viewing constituted fair use and was thus non-infringing.⁷⁵ Justice Stevens embodied this conviction when he delivered the Court's ultimate ruling: "[T]he sale of copying equipment, like the sale of other articles of commerce, does not constitute contributory infringement if the product is widely used for legitimate, unobjectionable purposes. Indeed, it need merely be capable of substantial noninfringing uses."⁷⁶ Thus, the Supreme Court concurred with the District Court's assertion that, "[W]hatever the future percentage of legal versus illegal home-use recording might be, an injunction which seeks to deprive the public of the very tool or article of commerce capable of some noninfringing use would be an extremely harsh remedy, as well as one unprecedented in copyright law."⁷⁷

Following the Court's decision in *Sony* and in response to the introduction of a new private copying medium called digital audio tape (DAT), artists and music producers alike feared that the new ability to make perfect copies would displace sales of legitimate

72. *Campbell v. Acuff-Rose Music, Inc.*, 510 U.S. 569, 577 (1994).

73. 464 U.S. 417 (1984).

74. *See id.* at 420-21.

75. *Id.* at 456.

76. *Id.* at 442.

77. *Id.* at 444 (quoting *Universal Studios, Inc. v. Sony Corp. of Am.*, 480 F. Supp. 429, 468 (C.D. Cal. 1979)).

recordings.⁷⁸ Congress responded, and in October 1992, President George Bush signed into law the Audio Home Recording Act (AHRA) of 1992.⁷⁹ The purpose of the legislation was to protect consumers from copyright infringement liability for taping (either video or audio) "copyrighted material for their own noncommercial, private use," while protecting copyright owners against widespread piracy.⁸⁰ To address proliferation of private copying, the AHRA both "adapt[ed] copyright law, and impose[d] a technical fix."⁸¹ Specifically, the AHRA enumerated three components relating to the protection of both consumers and copyright owners.⁸² First, copyright owners exchanged "all but the most slender thread of their claim" against private audio recording for royalties levied against producers of blank DATs and equipment.⁸³ Second, those who exercise "private" taping receive "immunity from copyright infringement actions, provided that the copying is performed on a digital audio copying device as defined by the AHRA."⁸⁴ And finally, manufacturers of all digital audio recording devices are required to implement a "Serial Copyright Management System" (SCMS) that will disable the device's ability to generate copies of any work it records, thereby controlling piracy via technology.⁸⁵

3. The Internet and Copyright Legislation

Two recently enacted pieces of copyright legislation directly

78. See GORMAN & GINSBURG, *supra* note 52, at 511.

79. 17 U.S.C. §§ 1001-1010 (1994).

80. 137 CONG. REC. S21305 (daily ed. Aug. 1, 1991) (statement of Sen. DeConcini).

81. GORMAN & GINSBURG, *supra* note 52, at 511.

82. See ROBERT A. GORMAN & JANE C. GINSBURG, COPYRIGHT FOR THE NINETIES 459-60 (4th ed. 1993).

83. See GOLDSTEIN, *supra* note 1, at 163.

84. Robert A. Starrett, *Copying Music to CD: The Right, the Wrong, and the Law* (Feb. 1998) <<http://www.emediapro.net/EM1998/starrett2.html>>.

85. 17 U.S.C. § 1002 (1994); see also *Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc.*, 29 F. Supp. 2d 624, 631-32 (C.D. Cal. 1998), *aff'd*, 180 F.3d 1072 (9th Cir. 1999). More specifically, § 1002 of the AHRA

prohibits the manufacture, importation, or distribution of recording devices unless they are equipped with a Serial Copy Management System [SCMS], a system which permits the user of a digital recorder to make only one copy of digital source material. The objective is to permit unlimited copying from the original recording but to prevent second or third generation perfect copies of source material from being freely copied and distributed. In pursuit of that objective the Act prohibits the manufacture, importation, or distribution of any device that could circumvent the serial copy management system.

Kurlantzick & Pennino, *supra* note 65, at n.46.

address copyright infringement and digital music on the Internet.⁸⁶ The first is the Digital Performance Right in Sound Recording Act (DPRSRA) of 1995, which introduced a limited public performance right in sound recordings for Digital transmission on the Internet.⁸⁷ The second is the Digital Millenium Copyright Act (DMCA),⁸⁸ signed into law by President Clinton in October 1998,⁸⁹ which increased protection for copyrighted material on-line. While both acts pertain to digital music on the Internet, the DMCA addresses some of the issues that correspond to the ease of instant reproduction of multiple copies on the Internet, while the DPRSRA pertains only to performance rights.

There are two main issues addressed in the DMCA: Online Service Provider ("OSP") liability and anti-circumvention provisions. With respect to the first, Title II of the DMCA limits the liability of providers of on-line materials when copyright infringement is caused by third parties.⁹⁰ In addition, recently added section 512 grants OSPs limited protection from direct, contributory, or vicarious copyright infringement liability under certain circumstances.⁹¹ The DMCA codified prior case law that held that OSPs could not be found "directly liable for copyright infringement when the OSP's system is merely a conduit for the spread of copyright-infringing materials."⁹² OSPs could, however, be liable for third party activity through

86. A third piece of legislation, the No Electronic Theft Act ("NET") was enacted in 1997 to address computer-based piracy. See Pub. L. No. 105-147, 111 Stat. 2678 (1997) (codified as amendments to 17 U.S.C. § 506 & 18 U.S.C. 2319). NET established criminal penalties for copyright infringement, regardless of profit motive. In November 1999, an Oregon college student pleaded guilty and was sentenced under NET to two years probation for posting pirated material (including 1,000 MP3 files) on his web site. See Jennifer Sullivan, *MP3 Pirate Gets Probation* (Nov. 24, 1999) <<http://www.wired.com/news/mp3/0,1294,32276,00.html>>.

87. Prior to the DPRSRA, the right of public performance was limited to songs (the underlying musical composition). Record companies were not entitled to collect fees from live performances or radio broadcasts because sound recordings do not have a general public performance right. See Bob Kohn, *A Primer on the Law of Webcasting and Digital Music Delivery*, 20 No. 4 ENT. L. REP. 4, 10 (Sept. 1998); see also generally <<http://www.kohnmusic.com>>.

88. Pub. L. No. 105-304, 112 Stat. 2860 (1998).

89. See GORMAN & GINSBURG, *supra* note 52, at 550.

90. 17 U.S.C.A. § 512 (West Supp. 1999); see also generally Brandon Murai, Comment, *Online Service Providers and the Digital Millennium Copyright Act: Are Copyright Owners Adequately Protected?*, 40 SANTA CLARA L. REV. 285 (1999).

91. See Murai, *supra* note 90, at 288.

92. *Id.* at 287 (citing *Playboy Enters., Inc. v. Webbworld, Inc.*, 991 F. Supp. 543 (N.D. Tex. 1997); *Playboy Enters., Inc. v. Russ Hardenburgh, Inc.*, 982 F. Supp. 503 (N.D. Ohio 1997); *Marobie-FL, Inc. v. Nat'l Ass'n of Fire Equip. Distribs.*, 983 F. Supp. 1167 (N.D. Ill. 1997); *Religious Tech. Ctr. v. Netcom*, 907 F. Supp. 1361 (N.D. Cal. 1995)).

contributory or vicarious copyright infringement.⁹³ The DMCA provides OSPs with a defense to possible infringement claims based on illegal acts committed by third party users. For example, one of the complex requirements in the DMCA allows copyright owners to demand that OSPs “take down” allegedly infringing material.⁹⁴ In return, OSPs will not be liable if they follow the “take down” procedures set forth in the Act.⁹⁵

The second issue addressed in the DMCA resembles the AHRA in its complicated technological approach to preventing copyright infringement, by making it illegal to circumvent technological protection measures (such as SCMS) used by copyright owners to control access to their works.⁹⁶ There are three main provisions contained in the DMCA’s anti-circumvention rules, addressing: (1) the *act of circumvention*, itself; (2) devices that circumvent *access controls*; and (3) devices that circumvent *copy controls*. The first of these rules is discussed in section 1201(a)(1)(A), which focuses on the *act of circumvention* and contains a general prohibition on circumvention of “a technological measure that effectively controls access to a work protected under this title.”⁹⁷ The remaining rules focus on technologies capable of facilitating circumvention.⁹⁸ In particular, section 1201(a)(2) addresses devices and technologies that circumvent *access controls*, including technological measures “that effectively control[] access to a work protected under this title.”⁹⁹ Similarly, section 1201(b)(1) addresses devices that circumvent *copy controls*, or, “protection afforded by a technological measure that effectively protects a right of a copyright owner . . . in a work or

93. See Murai, *supra* note 90, at 288 (citing *Webbworld, Inc.*, 991 F. Supp. at 553-54; *Hardenburgh, Inc.*, 982 F. Supp. at 514).

94. 17 U.S.C.A. § 512 (West Supp. 1999).

95. *Id.* § 512(b).

96. See *id.* §§ 1201-1205.

(A) to “Circumvent a technological measure” means to descramble a scrambled work, to decrypt an encrypted work, or otherwise to avoid, bypass, remove, deactivate, or impair a technological measure, without the authority of the copyright owner, and (B) a technological measure “effectively controls access to a work” if the measure, in the ordinary course of its operation, requires the application of information or a process or a treatment, with the authority of the copyright owner, to gain access to the work.

Id. § 1201(a)(3)(A), (B).

97. *Id.* § 1201(a)(1)(A); see also Pamela Samuelson, *Intellectual Property and the Digital Economy: Why the Anti-Circumvention Regulations Need to Be Revised*, 14 BERKELEY TECH. L.J. 525, 534 (1999).

98. See 17 U.S.C.A. §§ 1201(a)(2), (b)(1) (West Supp. 1999).

99. *Id.* § 1201(a)(2)(A).

portion thereof.”¹⁰⁰

This prohibition on circumvention of security measures is quite broad. In fact, the anti-circumvention provisions allow copyright owners to prevent access to their works that, under the Copyright Act, would not be infringing due to fair use.¹⁰¹ For example, although the *Sony* Court deemed recording a television program for personal use on a VCR fair use, storing an audio or video file from the Internet on a hard drive for later listening and viewing may be prohibited under the DMCA if the owner of the copyrighted content places a “technological measure” that controls access to or restricts copying of the program. Moreover, the rights to works protected by technological measures under section 1201 are not necessarily subject to the same limitations on exclusive rights as under the Copyright Act. In other words, the DMCA anti-circumvention provisions potentially make illegal otherwise legitimate uses.

III. THE THREAT AND PROMISE OF DIGITAL AUDIO ON THE INTERNET

In order to understand the potential threat and promise of digital audio on the Internet, it is first necessary to consider the perspective of the current copyright stakeholders such as record companies represented by the RIAA. The music industry relies upon current copyright practice¹⁰² because its income derives from record sales and copyright rules—rules which the recording industry lobbied strongly for—granting copyright owners exclusive rights in the reproduction and distribution of those pre-recorded media.¹⁰³ MP3 is not the first technology to threaten the music industry with piracy;¹⁰⁴ however, the

100. See *id.* § 1201(b)(1)(A).

101. See 144 CONG. REC. E2136-37 (daily ed. Oct. 13, 1998) (statement of Rep. Tom Bliley, Chairman of the Committee on Commerce, warning that “under section 1201(b) . . . a copyright owner could successfully block the manufacturing and sale of a device used to make fair use copies of copyrighted works, effectively overruling the Supreme Court’s landmark decision in *Sony Corp. of Am. v. Universal Studios, Inc.*, 464 U.S. 417 (1984).”).

102. See NIMMER, *supra* note 65.

103. “During the 105th Congress that ended in October 1998, the RIAA was a leading voice on issues that included . . . [the] World Intellectual Property Organization Treaties & The Digital Millennium Copyright Act.” *Legislation RIAA Online* (visited Mar. 18, 2000) <http://www.riaa.com/musicleg/ml_fed.htm>.

104. Devices embodying MPE technology pose some issues which are strikingly similar to the player piano in the early 1900’s, as well as to other earlier generations of new media. See *White-Smith Music Publishing Co. v. Apollo Co.*, 209 U.S. 1 (1908) (player pianos); see *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417 (1984) (videocassette recorders); see also David Segal, *Blame it on Rio (Music Industry Litigators Do)*, WASH. POST, Nov. 16, 1998, at F9 (stating that “CDs are essentially software and therefore are as easy to pirate as floppy disks.”).

digital format, in general poses some unique threats.

According to some, the recording industry believes that mass reproduction and distribution of digital audio files pose a much larger threat than reproduction of a CD onto cassette tapes because digital audio files can be perfectly copied, with little or no loss of quality.¹⁰⁵ Consequently, unlike people who use traditional duplication methods, recipients of digital copies of musical works may lack the impetus to purchase an authorized CD. The Internet, MP3 compression technology, and technologies that help locate and transfer music digitally further enhance the attractiveness of downloading digital audio files.

Thus far, the Internet has developed largely without regulation, lacking any valid authority capable of policing on-line communications and commerce.¹⁰⁶ In fact, one commentator has even observed that the Internet is an "inherently anarchistic place where copyright doesn't apply."¹⁰⁷ Therefore, many Internet users tend to believe that everything available over the Internet, including music, is free.¹⁰⁸ As a result of this misconception, the music industry has found itself "up against an international medium that is not ruled by any one country's laws," a medium that developed as a share-and-share-alike environment.¹⁰⁹ Because the recording industry relies upon record sales for revenue, it fears that music fans on the Internet, accustomed to utilizing the vast resources, products, and services at no cost, will choose to obtain unauthorized music for free, rather than paying for legitimate copies.¹¹⁰

105. See generally I. TROTTER HARDY, UNITED STATES COPYRIGHT OFFICE, PROJECT LOOKING FORWARD: SKETCHING THE FUTURE OF COPYRIGHT IN A NETWORKED WORLD (May 1998) <<http://lcweb.loc.gov/copyright/cpypub/thardy.pdf>>.

106. See CONNER-SAX & KROL, *supra* note 4, at 8 ("[T]he Internet's commercial growth is largely governed by the invisible hand of the free market. . . the U.S. government never really played a significant role in governing the Internet."). While the government initially maintained a fairly hands-off approach to ensure that a relatively unencumbered growth of the Internet (see generally *Reno v. ACLU*, 521 U.S. 844 (1997)), regulations pertaining to the Internet and e-commerce have evolved more haphazardly in the past two years. For a summary of current and pending legislation relating to the Internet, see *All About the Internet: Legislation* (visited Mar. 8, 2000) <<http://www.isoc.org/internet/law/legis.shtml>>.

107. Pauline Tam, *An On-Line Link to Top Tunes is Soon to Boom: On-Line: Music Industry Faces Anarchy of the Internet Independents*, VANCOUVER SUN, Aug. 2, 1994, at C4 (quoting Rob Lord of the Independent Underground Music Archive saying, "The Net is too beautiful a place. It's a cooperative, anarchistic system. The values that the music industry tries to superimpose onto the Internet don't apply.").

108. See Charap & Rothstein, *supra* note 13.

109. Lipton Krigel, *supra* note 9.

110. See *Testimony of Hilary Rosen*, *supra* note 26 (stating, "Of course, one thing that distinguishes music from most other products is that you can not only market and sell it

Contrary to the recording industry's concerns, however, not all uses of MP3 technology infringe. Reproduction and distribution (both legitimate and infringing), can occur at virtually no marginal cost.¹¹¹ For example, because the Internet serves as a legitimate way to generate revenue and reach consumers with marketing information and direct sales,¹¹² the same factors that threaten the recording industry and facilitate piracy—fidelity, compressibility, and malleability—also provide unconstrained market entry for independent record companies and individual musicians.¹¹³ Similarly, the Internet allows artists to reach their audience directly.¹¹⁴ What might be a threat to the status quo in the recording industry could present promising opportunities for independent labels and musicians.¹¹⁵

A. *The Cases*

In response to the perceived threat of the MP3 format, the recording industry has initiated several legal actions alleging digital music piracy.¹¹⁶ Three cases in particular were filed by the RIAA.¹¹⁷

online . . . you can actually deliver it, instantly, through the very same channel.”).

111. See Eric Schlachter, *The Intellectual Property Renaissance in Cyberspace: Why Copyright Law Could be Unimportant on the Internet*, Symposium, 12 BERKELEY TECH. L.J. 15, 20 (1997) (noting that “the costs of making one extra copy of intellectual property on-line are insignificant.”).

112. See Recording Indus. Ass’n of Am. v. Diamond Multimedia Sys., Inc., 180 F.3d 1072, 1074 (9th Cir. 1999) (noting that “the Internet also supports a burgeoning traffic in legitimate compressed audio files. Independent and wholly Internet record labels routinely sell and provide free samples of their artist’s work online, while many unsigned artists distribute their own material from their own websites.”); see also Robert MacMillan, *MP3.com Blasts RIAA at High Volume*, NEWSBYTES, Oct. 12, 1998, available in 1998 WL 20717326 (quoting Michael Robertson of music download site MP3.com: “[t]he (online music) market is already well underway, and that [sic] just because (the RIAA) is not controlling it does not mean that it does not exist and is not flourishing—legitimately.”).

113. “MP3 threatens the music industry in other ways that are ultimately more interesting than bootleg reproductions of copyrights material.” CONNER-SAX & KROL, *supra* note 4, at 364.

114. Direct access to audiences is another threat to the established business model the recording industry has built because it has the potential to remove the bottleneck, the necessity of the record companies themselves. See *Making an Ally of Piracy*, N.Y. TIMES, May 9, 1999, §2 at 50 (“It used to be that a label was needed to finance, manufacture, store, ship and market your music. . . . but in the digital era, it costs nothing to ship your music over the Internet to a fan.” (quoting Jaron Lanier’s manifesto “Piracy is Your Friend.”)); see also CONNER-SAX & KROL, *supra* note 4, at 362.

115. See MacMillan, *supra* note 112 (in discussing RIAA’s response to alternatives that now compete with the record labels, MP3.com’s President Michael Robertson states, “The train has already left the station. Now they want to derail it. None of the ‘A’s’ in RIAA stand for artists. They support the record industry.”).

116. See Brown, *supra* note 39 (“An RIAA lawsuit has become almost a coming-of-age ritual for online music companies attempting some new form of digital music distribution.”).

In the first case, *The Recording Industry Ass'n of America v. Diamond Multimedia Systems, Inc.*¹¹⁸ (the *Rio* case), plaintiff RIAA sued Diamond Multimedia under the AHRA.¹¹⁹ After the *Rio* case

117. At least one other case has been filed that involves digital music distribution on the Internet. A federal case filed in Washington, *RealNetworks v. Streambox* involves the anti-circumvention provisions of the DMCA and various other intellectual property claims. See Sara Robinson, 3 *Copyright Lawsuits Test Limits of New Digital Media* (Jan. 24, 2000) <<http://search.nytimes.com/search/daily/homepage/bin/fastweb?getdoc+cyber-lib+cyberlib+9767+1+wAAA+mp3>>. See *Compl. for Violation of the Digital Millenium [sic] Copyright Act, Contributory, Vicarious and Direct Copyright Infringement, Tortious Interference with Contract, Consumer Protection Act Violation and Lanham Act Violations*, *RealNetworks, Inc. v. Streambox, Inc.* (Wash. 1999) (No. C99-2070Z), available at (visited Mar. 15, 2000)

<http://www.realnetworks.com/company/pressroom/pr/99/rnwk_complaint.html>; see also *Response of Def. Streambox, Inc. to Pl.'s Mot. for Temporary Restraining Order and Order to Show Cause*, *RealNetworks, Inc. v. Streambox, Inc.* (Wash. 1999) (No. C99-2070P) available at (visited Mar. 15, 2000) <<http://www.streambox.com/RNvsSB/StreamboxResponse.htm>>; see also *Order On Pl.'s Mot. for Prelim. Inj.*, *Realnetworks, Inc. v. Streambox, Inc.* (Wash. 1999) (No. C99-2070P), available at (visited Mar. 15, 2000) <http://www.realnetworks.com/company/pressroom/pr/streambox/courtorder_011800.html>.

Additionally, while not directly addressing MP3, three cases have been filed on behalf of the motion picture industry regarding a DVD playback utility for the Linux operating system called DeCSS with the potential to impact digital media and intellectual property law on the Internet. The Motion Picture Association of America (MPAA) sued three individuals alleging violation of the DMCA by "proliferating a software device that unlawfully defeats the DVD copy protection and access control system." *Compl. for Violation of Provisions Governing Circumvention of Copyright Protection Systems, 17 U.S.C. Section 1201, et. seq.*, *Universal City Studios, Inc., et. al. v. Shawn C. Reimerdes, et. al.* (S.D.N.Y. 2000) (No. 00cv00277), available at (visited Mar. 15, 2000)

<http://www.eff.org/ip/Video/MPAA_DVD_cases/20000114_mpa ny_complaint.html>; In particular, eight major motion picture studios filed suit in New York stemming from the discovery and proliferation of a computer program that "unlawfully defeats the DVD copy protection . . . so that individuals can make, distribute, and/or otherwise electronically transmit or perform unauthorized copies of Plaintiff's copyrighted motion pictures and other audiovisual works." *Id.* See also *Prelim. Inj.*, *Universal City Studios, Inc., et. al. v. Shawn C. Reimerdes, et. al.*, available at (visited Mar. 15, 2000) (S.D.N.Y. 2000) (No. 00 Civ. 0277), <http://www.eff.org/ip/Video/MPAA_DVD_cases/20000120_pi_order.html>.

A related case was brought on behalf of the organization that licenses the encryption technology and claimed only a California trade secret violation. See *Compl. for Injunctive Relief for Misappropriation of Trade Secrets*, *DVD Copy Control Ass'n v. Andrew Thomas McLaughlin, et. al.* (Cal. Super. Ct. 2000) (No. CV786804), available at (visited Mar. 15, 2000) <http://www.eff.org/ip/Video/DVDCCA_case/19991228-complaint.html>; see also *Def.'s Mem. of P. & A. in Opp'n to Order to Show Cause Re: Prelim. Inj.*, *DVD Copy Control Ass'n v. Andrew Thomas McLaughlin, et. al.* (Cal. Super. Ct. 2000) (No. CV786804), available at (visited Mar. 15, 2000) <http://www.eff.org/ip/Video/DVDCCA_case/20000107-pi-motion-response.html>; *Order Granting Prelim. Inj.*, *DVD Copy Control Ass'n v. Andrew Thomas McLaughlin, et. al.* (Cal. Super. Ct. 2000) (No. CV786804), available at (visited Mar. 15, 2000) <http://www.eff.org/ip/Video/DVDCCA_case/20000120-pi-order.html>.

118. 180 F.3d 1072 (9th Cir. 1999).

119. See *Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc.*, 29 F. Supp. 2d 624 (C.D. Cal. 1998), *aff'd*, 180 F.3d 1072 (9th Cir. 1999).

settled, a flurry of cases were also filed that may help sort out some of the ambiguities pertaining to Internet music and copyright law. In particular, the RIAA sued Napster in December 1999, alleging contributory and vicarious copyright infringement.¹²⁰ Then, in January 2000, the RIAA filed suit against MP3.com claiming violation of the exclusive right to make reproductions of its sound recordings.¹²¹ Although the issues in these cases are complex and unresolved, they illustrate the conflicts between the recording industry and consumers as well as highlight critical policy issues involved with intellectual property rights and music on the Internet.¹²²

1. RIAA v. Diamond

On October 9, 1998, the RIAA filed a complaint in the United States District of the Central District of California against Diamond Multimedia, claiming Diamond's portable Rio MP3 player¹²³ violated the AHRA. The RIAA argued that the Rio would "harm [the RIAA] and the public interest by dramatically stimulating the traffic in illegal MP3 files."¹²⁴ More specifically, the RIAA asserted in its complaint that "because the overwhelming majority of MP3 music files on the Internet are unauthorized," the Rio would "facilitate and encourage the unlawful trafficking of infringing MP3 music files."¹²⁵ The RIAA also pleaded that the proliferation of pirated sound recordings threatened the music industry by discouraging consumers from purchasing legitimate recordings.¹²⁶ However, the RIAA limited its claim to the lone assertion that the *Rio* did not comply with the

120. See Mike France, *This Lawsuit is Cranking Up the Volume Over MP3* (Dec. 13, 1999) <http://www.businessweek.com/cgi-bin/ebiz/ebiz_frame.pl?url=/ebiz/9912/ep1213.htm>.

121. See Robinson, *supra* note 117.

122. See *id.* (noting that the recent cases reveal a "growing conflict between the entertainment industry, which is struggling to protect its products and profits in the Internet age, and consumer groups, which accuse the industry of interfering with free speech and people's rights to control their watching or listening experience.").

123. See discussion *supra* Part II.B. for a description of the Rio.

124. Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc., 29 F. Supp. 2d 624, 632-33 (C.D. Cal. 1998), *aff'd*, 180 F.3d 1072 (9th Cir. 1999). Until the *Rio* rendered MP3 files portable, MP3 users were limited to listening to their music files at their computers. See Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc., 180 F.3d 1072, 1074 (9th Cir. 1999).

125. *Compl. for Violation of the Audio Home Recording Act*, Recording Indus. Assoc. of Am. & Alliance of Artists and Recording Cos. v. Diamond Multimedia Sys., Inc. (C.D. Cal. 1998) (No. 98-8247), available at <http://www.riaa.com/piracy/pir_pr.htm>.

126. Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc., 180 F.3d at 1074. The RIAA predicts that "losses to digital Internet piracy will soon surpass the \$300 million that is allegedly lost annually to other more traditional forms of piracy." *Id.*; see also *id.* at n.1.

requirements set forth in the AHRA,¹²⁷ and did not allege a copyright infringement claim against Diamond.¹²⁸

The RIAA, in an attempt to deter other manufacturers of MP3 devices and to buy some time to sort the issues while preparing for trial, included in its complaint *ex parte* application enjoining Diamond from manufacturing and shipping the *Rio* MP3 player.¹²⁹ After oral arguments, the court issued a temporary restraining order enjoining Diamond from manufacturing or distributing the *Rio* player.¹³⁰ However, on October 26, 1998, the District Court denied the RIAA's motion for preliminary injunction, holding that "because the *Rio* is capable of recording legitimate digital music, an injunction would deprive the public of a device with significant beneficial uses."¹³¹

Following the District Court's ruling, the portable MP3 player entered the market for the 1998 holiday season.¹³² Six months later, in June 1999, The Court of Appeals for the Ninth Circuit issued its opinion on the RIAA's appeal of the District Court's denial of preliminary injunction.¹³³ The Court found that the *Rio* "is not a digital audio recording device subject to the restrictions of the [AHRA]" and upheld the District Court's denial of the preliminary injunction.¹³⁴ Following the Ninth Circuit's ruling and without

127. See 17 U.S.C. §§ 1002-1004 (1994) (setting forth the copying control and royalty payment requirements of devices that fall under the AHRA).

128. Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc., 29 F. Supp. 2d at 627 (citing *Sony* and noting that "even if the *Rio* is not subject to the AHRA and therefore subject to the Copyright Act—Defendant has a potential 'fair use' defense that might defeat any prima facie showing of infringement."); see also Charap & Rothstein, *supra* note 13 (speculating that "the RIAA omitted a copyright claim because it was wary of another Betamax decision—i.e. because the *Rio* device can transport pirated and legal audio files, it arguably has substantial non-infringing uses.").

129. See Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc., 29 F. Supp. 2d at 626.

130. See *id.*

131. *Id.* at 633.

132. See *Diamond Press Release*, *supra* note 34. Since December 1998, sales of the *Rio* and other portable MP3 players has intensified. See Freund, *supra* note 7, at 136 (noting that "[i]n the meantime, copyright squabbles aren't slowing the slew of competitors" and reporting on various MP3 players from a variety of manufacturers.). But see *Morning Edition, MP3 Devices to Record Music Via the Internet Not as Popular as Predicted and Music Companies are Still Arguing Over the Right to Copy Music From Their Artists* (National Public Radio broadcast, Nov. 15, 1999) available in LEXIS, National Public Radio Library. [hereinafter *Morning Edition*] (reporting that "[e]arlier this year, analysts were saying that by the holidays there'd be a dozen different MP3 players available. Instead, there are three.").

133. See generally Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc., 180 F.3d 1072 (9th Cir. 1999).

134. *Id.* at 1081 (noting that "a device falls within the [AHRA's] provisions if it can

releasing any terms, Diamond and the RIAA settled their case.¹³⁵

Although the Ninth Circuit's decision settled the question of whether the *Rio* was subject to the AHRA and led to the end of the RIAA's fight against the *Rio*, the following cases demonstrate that the RIAA's fight against the MP3 format and piracy on the Internet has not ceased.¹³⁶

2. RIAA v. Napster

On December 7, 1999, the RIAA brought a federal copyright action against Napster in California alleging contributory and vicarious copyright infringement for enabling Napster users to trade pirated music.¹³⁷ The RIAA is seeking up to \$100,000 per copyrighted song exchanged by way of the Napster program, claiming that "Napster is about facilitating piracy, and trying to build a business on the backs of artists and copyright owners."¹³⁸ The Napster program places the RIAA in a difficult situation because the music exchanged via Napster is not stored on central servers, but on the computers of individual users. This aspect presents too many users for the RIAA to effectively pursue individually.¹³⁹

At this time, neither the RIAA complaint nor Napster's response to the RIAA's charges are generally available. However, this case

indirectly copy a digital music recording by making a copy from a transmission of that recording. Because the *Rio* cannot make copies from transmissions, but instead, can only make copies from a computer hard drive, it is not a digital audio recording device.").

135. See Chris Oakes, *RIAA, Diamond Sweep Away Suit* (Aug. 4, 1999) <<http://www.wired.com/news/print/0,1294,21089,00.html>>; see also Charap & Rothstein, *supra* note 13, at n.10 (quoting Diamond's general counsel, Ron Moore, saying, "Diamond Multimedia and our RioPort subsidiary are pleased to bring an end to this legal dispute as we move forward with the music industry on the development of secure e-commerce music offerings through [SDMI]").

136. The RIAA fights a constant battle, monitoring and shutting down Internet sites with illegal MP3 files. See *RIAA Releases 1999 Midyear Anti-Piracy Statistics* (Aug. 17, 1999) <http://www.riaa.com/piracy/pir_pr.htm##_top> ("In the first six months of 1999, the RIAA's Internet enforcement team sent thousands of cease and desist and educational letters to sites offering unauthorized songs for download."); see also *Get Your Hands Off Our Music*, (Dec. 8, 1999) <<http://www.wired.com/news/print/0,1294,32977,00.html>> (reporting on the recent suit filed against Napster. The article states that the RIAA, "angered by the ease with which visitors to Napster.com can download and share music files, has filed a copyright infringement suit against the music software company.").

137. See France, *supra* note 120.

138. Jack McCarthy, *Studios Sue MP3 Startup Napster* (Dec. 9, 1999) <<http://www.cnn.co.jp/1999/TECH/computing/12/09/napster.suit.idg/index.html>> (quoting Cary Sherman, general counsel of the RIAA).

139. See Scott Rosenberg, *The Napster Files* (Feb. 4, 2000) <http://www.salon.com/tech/col/rose/2000/02/04/napster_swap/index.html>.

has been widely covered in the media and is bound to address some of the controversy of on-line music. There is no doubt that people can and do use Napster to trade copyrighted music. Is Napster responsible for the illegal activities of its individual users? If Napster can establish that third-party material merely passes through its system, it may escape liability entirely.¹⁴⁰ Otherwise, as an OSP, Napster will probably claim that it has limited liability under the DMCA for the infringing activities of its members.¹⁴¹ In order to hold Napster responsible for the acts of its members, the RIAA will have to prove that Napster had "actual knowledge" that material it refers or links users to contained copyrighted material and was infringing.¹⁴²

Another argument available to Napster is the invocation of the *Sony* case to support a defense that Napster cannot be liable for contributory infringement because it is a program that facilitates substantial non-infringing uses.¹⁴³ Although a more thorough exploration of the issues of this case is beyond the scope of this comment, the dispute is worth watching because of the critical policy issues it raises. While copyright owners are justified in trying to protect their intellectual property from piracy on the Internet, holding Napster responsible for the infringing actions of its users could upset the balance sought by copyright law, thereby posing a substantial burden upon a variety of companies that provide directory and search services to copyrighted materials available on-line.¹⁴⁴

3. RIAA v. MP3.com

The RIAA filed suit in New York against MP3.com on January 21, 2000 alleging that MP3.com's new "My.MP3.com" service violates copyrights owned by record companies that the RIAA represents.¹⁴⁵ MP3.com claims that its "Beam-It" software program, which recognizes CDs in a customer's CD-ROM drive, acts "sort of

140. Specifically, to qualify as "Transitory Digital Network Communications," Napster must not (1) initiate the transmission; (2) select the material; (3) select recipients for the transmission; (4) make or keep copies for longer than the time it takes to transmit or route; or (5) alter the content. 17 U.S.C.A. § 512(a) 1-5 (West Supp. 1999).

141. See discussion *supra* Part II.C.3. for a brief description of OSP immunity under the DMCA.

142. See 17 U.S.C.A. § 512(d) (West Supp. 1999) for a description of the DMCA provisions regarding OSP liability and "Information Location Tools."

143. See Brown, *supra* note 39.

144. See generally *id.*

145. See *Compl. For Copyright Infringement*, UMG, Inc., et. al. v. MP3.com, Inc. (S.D.N.Y. 2000) (No. 00 Civ. 0472), available at (visited Mar. 16, 2000) <<http://www.mp3.com/news/533.html?hparticle2>>; see also Robinson, *supra* note 117.

like a license" to access the music in the MP3.com database.¹⁴⁶ Conversely, the RIAA alleges that MP3.com has no license to the music that it catalogues for playback to its customers. In an open letter to MP3.com's CEO Michael Robertson, RIAA president Hillary Rosen stated, "[i]t is not legal to compile a vast database of our member's sound recordings with no permission and no license. And whatever the individual's right to use their own music, you cannot exploit that for your company's commercial gain."¹⁴⁷

In response to the RIAA's allegations, MP3.com claims that it has implemented sufficient security features to prevent unauthorized copying and that the service is merely another version of the time-shifting practices authorized by the Court in *Sony*.¹⁴⁸ MP3.com's Robertson asserts that consumers have the right to listen to digital music files if they have already paid for the CD and poses the question: "You don't have to pay more royalties to listen to a CD in your living room; why should you pay more royalties to listen to your CD in your living room on your computer?"¹⁴⁹ Whether MP3.com will ultimately prevail under a fair use defense—that the My.MP3.com service is equivalent to making a copy for personal use—remains to be determined.

B. Outlook

According to copyright expert Paul Goldstein, copyright owners usually suffer and consumer electronics companies usually benefit while Congress and the courts delay rulemaking regarding home copying.¹⁵⁰ In fact, one major reason for the court's denial of the injunction in the *RIAA v. Diamond* case is that the risk of harm to the record companies posed by the *Rio* was greatly outweighed by the interest of promoting emerging technology.¹⁵¹ Although the *Rio* case

146. Brown, *supra* note 39 ("The RIAA's lawsuit here hinges around the invisible machinations behind Beam-It: Whenever you 'beam' a CD into your account, someone at MP3.com is actually running out and buying that CD and ripping it for you. MP3.com has amassed and ripped a collection of 45,000 CDs to have at the ready.").

147. Letter from Hilary Rosen, President and CEO, RIAA, to Michael Robertson, CEO, MP3.com (Jan. 21, 2000) <<http://www.mp3.com/response2.html>>.

148. See *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 418 (1984).

149. Brown, *supra* note 39.

150. See GOLDSTEIN, *supra* note 1, at 134.

151. See *Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc.*, 29 F. Supp. 2d 624, 633 (C.D. Cal. 1998), *aff'd*, 180 F.3d 1072 (9th Cir. 1999) (emphasizing that the evidence offered by Diamond showed "an injunction would substantially impact... at a minimum... multi-million dollar losses" of revenues collected in the sale of the *Rio*; denying the injunction because the court felt the *Rio* was a device with "significant beneficial uses.").

settled, the pending litigation is convincing evidence that the RIAA remains afraid that as time passes and more consumers embrace the flexibility of the MP3 format, the expectation of free copying will proliferate.¹⁵²

1. The Law

Congress has faced the difficult task of predicting effects of new technology on the marketplace. Robert Kastenmeier, chair of the House Intellectual Property subcommittee prior to the Copyright Act of 1976 Act, articulated this difficulty, stating, "if you wait until the problem is mature, the industrial interests that are posed one against another may be so significant [that it is much more difficult to transcend them without] destroying one party commercially or financially, than it would be had you anticipated the problem years before."¹⁵³ With the passage of the 1976 Act, Congress intended to ensure that copyright laws could potentially apply to emergent, possibly unimagined, new technologies:¹⁵⁴

Authors are continually finding new ways of expressing themselves, but it is impossible to foresee the forms that these new expressive methods will take. The [1976 Act] does not intend either to freeze the scope of copyrightable subject matter at the present stage of communications technology [or to establish a limitless framework].¹⁵⁵

In considering whether to adjust the Copyright Act in the face of emerging technology, including the Internet, a recent report entitled Intellectual Property Rights on the National Information Infrastructure ("White Paper")¹⁵⁶ by the Clinton Administration's Information Infrastructure Task Force (the "Task Force") recognized that:

When technological advances cause ambiguity in the law, courts look to the law's underlying purposes to resolve that ambiguity. However, when technology gets too far ahead of the law, and it

152. GOLDSTEIN, *supra* note 1, at 134.

153. *Id.*

154. See JON A. BAUMGARTEN ET AL., BUSINESS & LEGAL GUIDE TO ONLINE-INTERNET LAW 205 (1997).

155. *Id.* (quoting H.R. REP. NO. 94-1476 at 51 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5664).

156. INFORMATION INFRASTRUCTURE TASK FORCE, INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE: THE REPORT ON THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS (Sept. 1995) (Bruce Lehman & Ronald H. Brown, Chairs) [hereinafter WHITE PAPER].

becomes difficult and awkward to adapt the specific statutory provisions to comport with the law's principles, it is time for reevaluation and change.¹⁵⁷

The White Paper concluded that existing copyright law is flexible enough to adapt to inevitable changes in circumstances, and predicted that only limited adjustments would be necessary.¹⁵⁸

It is arguable whether or not the update to the Copyright Act included in last year's DMCA constitutes the "limited adjustments" contemplated by the Task Force. For instance, with the anti-circumvention provisions in the DMCA, Congress introduced a "novel concept into copyright law—for the first time, the law protects not only the copyrighted work, but the means that are used to control access to that work."¹⁵⁹ Copyright is said to be a "bargain" between the public and copyright holders.¹⁶⁰ Prior to the DMCA anti-circumvention provisions, neither Congress nor the courts had relinquished control to copyright owners over "looking at, listening to, learning from, or using copyrighted works."¹⁶¹ This has lead copyright experts to ask if this type of copyright protection, that potentially burdens the public, is necessary as an incentive to creative production?

The success of the Internet has been attributed to "both satisfying basic community needs as well as utilizing the community in an effective way to push the infrastructure forward."¹⁶² The notion of private individuals all over the world swapping digital music, having access to an entire music collection from anywhere on the Internet, and copying those MP3 files onto portable media, is no longer a mere vision of the future. Although the anti-circumvention provisions in the DMCA may seem like a reasonable response to the threat of piracy in the digital age, the new laws might actually retard growth of

157. *Id.* at 211.

158. *Id.* at 90-95.

159. *WIPO The DMCA One Year Later: Assessing Consumer Access to Digital Entertainment on the Internet and Other Media: Hearing Before the Subcomm. on Telecommunications, Trade, and Consumer Protection, Comm. on Commerce, 106th Cong. 29 (1999)* (statement of Peter Harter, Vice President, Global Public Policy and Standards, EMusic.com), available in LEXIS, Federal Document Clearing House Congressional Testimony File [hereinafter *Harter Testimony*].

160. Raymond T. Nimmer, *Breaking Barriers: The Relation Between Contract And Intellectual Property Law*, 13 BERKELEY TECH. L.J. 827, 855 (1998); see generally Jessica Litman, *The Exclusive Right to Read*, 13 CARDOZO ARTS & ENT. L.J. 29 (1994).

161. Jessica Litman, *Revising Copyright Law for the Information Age*, 75 OR. L. REV. 19, 35 (1996) [hereinafter Litman, *Revising Copyright Law for the Information Age*].

162. ISOC, *supra* note 16.

digital media and the Internet.¹⁶³ Along these lines, Berkeley law professor Pamela Samuelson warns that:

[C]ultivating good citizenship is probably a better idea than trying to mandate that every piece of technology can't play something for which there is no authorization. In some sense you have to think through your long-term strategy. The kind of Draconian measures it would take to stop [piracy] would make us a copyright police state which we wouldn't want to live in.¹⁶⁴

With the recent emergence of affordable high performance computers and high-speed Internet connections, the RIAA seems to have positioned itself against digital audio technology rather than embracing its continuing development.¹⁶⁵ The recording industry would most likely prefer that any new copyright rules support continued dominance in the marketplace.¹⁶⁶

2. "Securing" Digital Music

In denying the RIAA's appeal of the District Court's ruling on the preliminary injunction, the Ninth Circuit concluded that the *Rio* is not a "Digital Audio Recording Device" as defined by the AHRA.¹⁶⁷ Therefore, the *Rio* MP3 player was not required to "comply with the SCMS requirement."¹⁶⁸ While not required, the recording industry's approach to fighting piracy (in addition to litigation) has been to develop copyright management systems, technological measures to limit piracy, that it hopes will be adopted industry-wide. Along these lines, in December 1998, the RIAA, consumer electronics companies (including *Rio* manufacturer, Diamond), and Internet Music representatives, formed the Secure Digital Music Initiative (SDMI), a

163. See *Harter Testimony*, *supra* note 159 (suggesting that the DMCA, a "law designed to foster the growth of digital media may, in fact, have just the opposite result.").

164. Leonard, *supra* note 12 (quoting U.C. Berkeley law professor Pamela Samuelson).

165. See Peraino, *supra* note 50, at 144-45 (discussing the RIAA's legal attempts to block the *Rio* in 1998 and DAT recorders in 1990).

166. In fact, the RIAA was a leading voice in the formation of the DMCA. See <http://www.riaa.com/musicleg/ml_fed.htm>; see also Litman, *Revising Copyright Law for the Information Age* *supra* note 161, at 25.

167. See generally Recording Indus. Ass'n of Am. v. Diamond Multimedia Sys., Inc., 180 F.3d 1072, 1078 (9th Cir. 1999). The court focused primarily on the fact that the *Rio* only "recorded" from a computer hard drive, that "the *Rio* merely makes copies in order to render portable, or 'space-shift,' those files that already reside on a user's hard drive. . . . Such copying is paradigmatic noncommercial personal use . . ." *Id.* at 1079. The court also noted the fact that the *Rio* "does not permit such further copies to be made because it simply cannot download or transmit the files that it stores to any other device." *Id.*

168. *Id.* at 1078.

forum to develop technological standards to limit consumers' ability to copy digital music in MP3 and other digital music formats.¹⁶⁹

Since its formation in late 1998, SDMI has been meeting worldwide but failed to meet its goal of having SDMI-compliant products available for the 1999 holiday season and continues to finalize its standards.¹⁷⁰ SDMI has provided some guidelines for distribution of on-line music but the future of SDMI is uncertain.¹⁷¹ One approach to securing digital music is to develop technologies that control how digital music is used after purchase, such as limiting the number times a consumer can copy, play or distribute digital copies.¹⁷² As more secure formats become available, it is predicted that more music from the major record labels and more consumer electronic devices to playback MP3 formatted music files will become available.¹⁷³

169. SDMI was announced at a press conference by Hilary Rosen, President and CEO of the RIAA, in December 1998. See *Worldwide Recording Industry Announces Precedent-Setting Initiative to Address New Digital Music Opportunities* (Dec. 15, 1998) <http://www.riaa.com/tech/tech_pr.htm>. SDMI consists of "more than 120 companies and organizations representing a broad spectrum of information technology and consumer electronics businesses, Internet service providers, security technology companies and members of the worldwide recording industry." *SDMI Fact Sheet* (visited Mar. 15, 2000) <http://www.sdmi.org/public_doc/FinalFactSheet.htm>. SDMI serves as a

forum for these industries to develop the voluntary, open framework for playing, storing and distributing digital music necessary to enable a new market to emerge. SDMI is working on two tracks. The first has already produced a standard, or specification, for portable devices. The longer-term effort is working toward completion of an overall architecture for delivery of digital music in all forms. *Id.*

170. See Michael Learmonth, *CD, Cassette – Or Download?* THE STANDARD (Mar. 6, 2000) <<http://www.thestandard.com/article/display/0,1151,12466,00.html>>.

171. See *Morning Edition*, *supra* note 132 (reporting that Phase I only distinguishes "between music... that was released before SDMI and that which will come after. It does this by requiring an inaudible digital signal to be imbedded in any music that's released from now on. The major labels will start including it soon."); see also Stephanie Miles, *Infighting Threatens to Kill Net Music Antipiracy Standard*, (Sept. 23, 1999) <<http://news.cnet.com/category/0-1005-200-122852.html>> (quoting Sony Vice President Geoffrey Anderson's email message to SDMI members: "Despite the months of hard work by the SDMI participants, SDMI portable device manufacturers and SDMI service providers are still unable to prepare for this holiday season... We will be deeply disappointed if continued delays within SDMI frustrate the goals of implementers and SDMI alike.").

172. See Christopher Jones, *RIAA-Friendly Rio Surfaces* (Mar. 16, 2000) <<http://www.wired.com/news/print/0,1294,35003,00.html>>.

173. See *id.* Some critics predicted that portable MP3 devices would be popular regardless of SDMI. See Eric Scheirer, *The End of SDMI* (Oct. 15, 1999) <<http://www.mp3.com/news/394.html>> (stating that "[t]he floodgates are opening. Portable devices will be huge for Christmas this year; they will all play MP3, and none of them will be SDMI-compliant in any way that matters."). Some commentators, however, suggest that MP3 players have been "slow to take off because they've raised fundamental questions about the way

Not all members of the on-line music community embrace the SDMI copyright management specifications.¹⁷⁴ Critics of SDMI assert that the music industry will use SDMI standards to leverage its distribution power and to maintain control.¹⁷⁵ The concern is that SDMI will be a proprietary standard that, along with the DMCA's anti-circumvention provisions, will reduce copyright holders' ability to "authorize distribution of their works" as they see fit, while allowing for consumers' right to fair use.¹⁷⁶

Because services and technologies like the Rio, Napster, and My.MP3.com have made it possible to embody music in this new medium, songwriters, publishers, and record companies are recognizing common interests that have spurred them to reach formal and informal compromises with regard to on-line copyright problems.¹⁷⁷ SDMI, along with other copyright management systems in development are examples of non-judicial, non-legislative approaches addressing piracy concerns.¹⁷⁸ Whether the RIAA will

the music industry distributes its product." *Morning Edition*, *supra* note 132.

174. In fact, some claim the standard is "doomed." See Jane Wakefield, *Rival Predicts Death for SDMI Standard* (last modified July 11, 1999) <<http://www.zdnet.com/zdnn/stories/news/0,4586,2290381,00.html>>, available in 1999 WL 14793573 (quoting Bob Kohn, chairman of Emusic.com, saying that "MP3 is the operating system of digital downloads. . . . In a year's time, the SDMI standard will suffer the same demise as Divx. The standards war is over today.").

175. Beth Lipton Krigel, *Music Initiative Raises Questions* (Dec. 16, 1998) <<http://news.cnet.com/news/0-1005-200-336464.html?tag=st.cn.1>> (quoting online record company spokesman Steve Grady's reaction to the RIAA's announcement in December 1998: "The announcement was not at all about security or about piracy—it's about control. . . . By implementing security, they maintain control."); see also Scheirer, *supra* note 173 (stating that SDMI is not "just about providing security options to the musician, though. It [is] about providing security options that [are] controlled by the music industry.").

176. See generally *Electronic Frontier Foundation Digital Audio and Free Expression Policy Statement*, *supra* note 13. In May 1999, the Electronic Frontier Foundation (EFF), the Internet's "leading free-expression political action group," held its first meeting of the Consortium for Audiovisual Free Expression (CAFE), to bring together a group of musicians, technologists, entrepreneurs, and attorneys to "refine a platform, develop educational and legal strategies to protect open standards in the digital music space, and counter recording industry efforts to limit those standards." See James Glave, *Music for the Masses*, (May 26, 1999) <<http://www.wired.com/news/politics/0,1283,19884,00.html>>.

177. See Neuburger & Israel, *supra* note 2, at C17. One compromise provides that the holder of the copyright in a sound recording may allow 30-second downloads without incurring a mechanical licensing obligation to the holder of the copyright in the underlying composition, if the downloads promote the sale of the recording. Similarly, the holder of the copyright in the underlying composition may allow 30-second downloads without incurring an obligation to the holder of the copyright in the sound recording, again provided that the downloads promote the sale of the recording. *Id.*

178. See Glave, *supra* note 176.

come to a similar collaborative compromise in its suits against Napster and MP3.com remains to be seen. The Napster and MP3.com cases are rooted in the RIAA's concern about the future of digital music distribution. Both technologies offer users control over collecting, exchanging and listening to music, and they are both means of music distribution and transmission that do not necessarily originate with the recording industry.¹⁷⁹

IV. CONCLUSION

Even with advanced technological measures, like SDMI, some "pirates will always be able to crack such protection."¹⁸⁰ Because the latest digital technologies facilitate unlimited reproductions with little or no loss of sound quality, copyright owners legitimately fear that their works will be freely copied and disseminated without compensation, in violation of copyright law.¹⁸¹ Consequently, it is not surprising that each time a new digital music technology emerges, the recording industry attempts to limit its release.¹⁸² Perhaps the problem with MP3 is that it is too late—"the horse is already out of the barn."¹⁸³ Too often, the ire is misdirected towards technology, rather than the people who use the technology. In other words, players do not pirate, pirates pirate.¹⁸⁴

As copyright management standards are developed and the DMCA is both implemented and interpreted, the balance of private and public interests underlying copyright law must be preserved. While unauthorized reproduction of copyrighted works is a valid concern for the recording industry, any measures to curb piracy must also consider the public interest and the limitations on the copyright monopoly—legitimate non-infringing uses of MP3 technology. Copyright law should not function to support outdated business

179. See Brown, *supra* note 39.

180. Leonard, *supra* note 12.

181. See CONNER-SAX & KROL, *supra* note 4, at 361-62; see also Peraino, *supra* note 50.

182. *Weekend Edition-Sunday* (National Public Radio broadcast, Nov. 1, 1998), available in 1998 WL 6516736 (information age specialist Rich Dean stating that "so far the music and recording industry has fought just about every innovation, usually because they're concerned about people pirating CDs and tapes.").

183. Leonard, *supra* note 12. The article also notes that "all the music that has ever been released already on compact disc is up for grabs, unprotected and easily transferable," and quotes Michael Robertson of MP3.com as saying, "They are in a pickle. . . . People are going to have access to these songs if they want them . . ."; see also Brown, *supra* note 39 (noting that "the real question is whether the record industry will itself try to adapt—and, instead of trying to derail the train, will jump on and take a ride.").

184. Neil Gross, *Target Pirates—Not Technology*, BUS. WK., Nov. 2, 1998, at 40.

models; it should merely support the ability of copyright owners to select their own appropriate business model.

